

DERWENT-ACC-NO: 1999-260443

DERWENT-WEEK: 200216

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Track circuit system used in train  
detector and train operation control system - has  
controller that detects location of train based on input  
signals of transceivers arranged on every area unit of  
predetermined track

PATENT-ASSIGNEE: HITACHI LTD[HITA]

PRIORITY-DATA: 1997JP-0244003 (September 9, 1997)

PATENT-FAMILY:

PUB-NO	PAGES	PUB-DATE	MAIN-IPC
JP 11078891 A		March 23, 1999	N/A
014	B61L 027/00		
JP 3261081 B2		February 25, 2002	N/A
013	B61L 001/18		

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
JP 11078891A	N/A	1997JP-
0244003	September 9, 1997	
JP 3261081B2	N/A	1997JP-
0244003	September 9, 1997	
JP 3261081B2	Previous Publ.	JP 11078891
N/A		

INT-CL (IPC): B61L001/18, B61L027/00 , H04L012/40

ABSTRACTED-PUB-NO: JP 11078891A

BASIC-ABSTRACT:

NOVELTY - The track circuit system has a controller (4) that detects the location of a train based on the input signals of transceivers (21-26) arranged on every area unit of a predetermined track. DETAILED DESCRIPTION - The track circuit system has a simulation track circuit (3) equivalent to the track circuits (1T-3T). The transceivers transmit

and receive signals to each simulation track circuit and track circuit for detecting train location. A switching unit selectively connects the transceivers to any one of the track circuits and simulation track circuit. The transceivers are switched over, in which some of the transceivers (21-23) are operated while the other transceivers (24-26) are in standby mode. An INDEPENDENT CLAIM is included for a simulation track circuit.

USE - Used in train detector and train operation control system.

ADVANTAGE - Level of telegraphic message can be adjusted by transmitting the telegraphic message to a simulation track circuit, without transmitting the telegraphic message to the actual track circuit. Wiring between controller and transceivers can be maintained and verified, thus, track circuit can be correctly evaluated by investigating the transceiver receiving the telegraphic message output to the simulation track circuit.

DESCRIPTION OF DRAWING(S) -

The figure shows the entire block diagram of the track circuit system. (1T-3T)

Track circuits; (3) Simulation track circuit; (4)

Controller; (21-26)

Transceivers.

CHOSEN-DRAWING: Dwg.1/10

TITLE-TERMS: TRACK CIRCUIT SYSTEM TRAIN DETECT TRAIN  
OPERATE CONTROL SYSTEM CONTROL DETECT LOCATE TRAIN BASED  
INPUT SIGNAL TRANSCEIVER ARRANGE AREA UNIT PREDETERMINED  
TRACK

DERWENT-CLASS: Q21 W01

EPI-CODES: W01-A06B1;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N1999-194461